

**Draft Summary of the Environmental Work Group Meeting
Oroville Facilities Relicensing (FERC Project No. 2100)
August 25, 2004**

The Department of Water Resources (DWR) hosted a meeting for the Environmental Work Group (EWG) on August 25, 2004 in Oroville.

A summary of the discussion, decisions made, and action items is provided below. This summary is not intended to be a transcript, analysis of the meeting, or to indicate agreement or disagreement with any of the items summarized, except where expressly stated. The intent is to present a summary for interested parties who could not attend the meeting. The following are attachments to this summary:

Attachment 1	Meeting Agenda
Attachment 2	Meeting Attendees
Attachment 3	Presentation on SP-F10, Task 2C
Attachment 4	Final Report, SP-F10, Task 2C, Evaluation of the Timing, Magnitude and Frequency of Water Temperatures and Their Effects on Chinook Salmon Egg and Alevin Survival
Attachment 5	Presentation on SP-F10, Task 2D
Attachment 6	Final Report, SP-F10, Task 2D, Evaluation of Flow Fluctuation Effects on Chinook Salmon Redd Dewatering In the Lower Feather River
Attachment 7	Final Report, SP-F3.2, Tasks 1, 4 and 5, Comparison of Fish Distribution to Fish Habitat in the Lower Feather River
Attachment 8	Presentation on SP-3.2, Tasks 1, 4 and 5
Attachment 9	Presentation on SP-F3.2, Task 3B
Attachment 10	Final Report, SP-F3.2, Task 3B, Assessment of Potential Project Effects on Splittail Habitat
Attachment 11	Final Report, SP-F10, Task 3C, Juvenile Steelhead and Chinook Salmon Stranding in the Lower Feather River, 2001-2003
Attachment 12	Presentation on SP-F10, Task 3C
Attachment 13	SP-G2, Task 2, Spawning Riffle Characteristics
Attachment 14	Presentation on SP-G2, Task 2
Attachment 15	Draft Final Report, SP-T10, Effects of Project Features, Operations and Maintenance on Upland Plant Communities
Attachment 16	Presentation on SP-T10
Attachment 17	Final Report: Evaluation of Water Surface Fluctuations on Bass Nest Dewatering and Characterization of Inundated Littoral Habitat in the Thermalito Afterbay
Attachment 18	Presentation on SP-F3.1, Task 4C
Attachment 19	SP-W3, Year 1 Progress Report, Parts 1, 2, and 3
Attachment 20	Presentation on SP-W3
Attachment 21	SP-W7, Land and Watershed Management Effects on Water Quality, Tasks 1 and 1B
Attachment 22	Presentation on SP-W7

I. Introduction

Attendees were welcomed to the EWG meeting. Attendees introduced themselves and their affiliations. The desired outcomes of the meeting were discussed as listed on the meeting agenda. The agenda was revised to defer presentations of SP-F1, SP-F5/7, Task 2 and SP-G2,

Tasks 3 and 4 until next EWG meeting. The meeting agenda and list of meeting attendees are appended to this summary as Attachments 1 and 2, respectively.

II. Action Items – July 28, 2004 EWG Meeting

The summary of the July 28, 2004 EWG meeting has been posted on the relicensing web site. The Facilitator reviewed the status of action items from the July EWG meeting as follows:

Action Item #E137: Provide copy of matrix to Mike Mainz (CDFG).

Status: Mike Manwaring (MWH) noted he had not sent the matrix but would complete this action.

III. Modeling Update

Curtis Creel (DWR) noted that the modeling group is working on completing the various flow scenarios and had completed the Scenario 23 and provided results to the Flow/Temperature Task Force on August 4th (see discussion below).

IV. Resource Action Discussion

Task Force Meeting Updates and Next Meetings

Hatchery Task Force: Brad Cavallo (DWR) reported that the Hatchery Task Force met on August 17th to discuss comments on the F9 report. Brad noted that there are still some holes in the report but it does address disease, genetics and straying issues. The Task Force expects to meet one more time before presenting the F9 report to the EWG September meeting. The report makes specific recommendations not everyone on the task force agrees with.

Flow/Temperature Task Force: Curtis Creel noted that the task force plans to meet again to answer follow-up questions based on the results of Scenario 23 presented on August 4th. The next meeting is scheduled for September 1st at 9am in Sacramento with video-conferencing capabilities.

Juanita Anglin (Cherokee Tribe) circulated photos she had taken showing stagnant water in public swim areas along the low flow channel near Bedrock Park. She said the community is concerned with the water quality in these public swim and picnicking areas and suggested DWR undertake a program to test, monitor and clean up the water in these areas so water-contact recreationists are not at risk to their health by swimming in the waters. Jerry Boles (DWR) responded that DWR has been sampling water quality in these areas as part of the studies for relicensing.

V. Study Deliverables and Implementation Updates

Reports

SP-F10, Task 2C

Adrian Pitts (SWRI) provided a presentation on SP-F10, Task 2C, Evaluation of the Timing, Magnitude and Frequency of Water Temperatures and Their Effects on Chinook Salmon Egg and Alevin Survival. The report was distributed at the July 2004 EWG meeting (Attachment 4). He reported that the results indicate Chinook salmon egg and alevin losses during the 2002/2003 spawning and incubation season in the lower Feather River was 16.3% in the lower Feather River with 10.6% in the low flow channel and the rest in the high flow channel. This value is within the range of recent estimates included in the USBR's OCAP BA for spring-run and fall-run Chinook salmon in the Sacramento River and fall-run Chinook in the lower American River.

SP-F10, Task 2D

Adrian Pitts (SWRI) provided a presentation on SP-F10, Task 2D that evaluates flow fluctuation effects on Chinook salmon redd dewatering in the lower Feather River (Attachment 5). The report entitled "Final Report, SP-F10, Task 2D, Evaluation of Flow Fluctuation Effects on Chinook Salmon Redd Dewatering in the Lower Feather River" was distributed at the July 2004 EWG meeting (Attachment 6). The EWG discussed how these results indicate the current operations do not appear to be dewatering significant redd sites.

SP-F3.2, Tasks 1, 4, 5

Dave Olson (SWRI) distributed Final Report, Comparison of Fish Distribution to Fish Habitat in the Lower Feather River (Attachment 7) and provided a presentation (Attachment 8). He explained the fish distribution sampling methodology and described the fish habitat query form used to determine which sets of components were suitable for which species. He described the maps and graphs associated with fish species distribution, mesohabitat and substrate distribution, depth and water temperature and quality data. The EWG discussed how this tool could be used to preferentially manage for some species and evaluate the effects on others.

SP-F3.2, Task 3B

Dave Olson provided a presentation on the potential project effects on splittail spawning habitat (Attachment 9). The report entitled "Final Report, SP-F3.2, Task 3B, Assessment of Potential Project Effects on Splittail Habitat" was distributed at the July 2004 EWG meeting (Attachment 10). He described the approach used to assess potential effects and explained usable flooded area curves. Data suggest high flows equal strong year classes with spawning probably occurring in the bypass during flooding however it was pointed out that the relative contribution of the Feather River to overall splittail population is unknown.

SP-F10, Task 3C

Ryon Kurth (DWR) distributed Final Report Juvenile Steelhead and Chinook Salmon Stranding in the Lower Feather River, 2001-2003 (Attachment 11) and provided a presentation (Attachment 12). Sampling of isolated areas reveals that few juvenile salmon and steelhead become isolated. The proportion of stranded salmonids represents a very small percentage of the estimated number of emigrants. Current ramping rates are not contributing to stranding nor are they providing incremental benefit that might be realized with more typical ramping rates. The pond habitat might also be contributing positively to growth rates.

SP-G2, Task 2

Dave Forwalter (DWR) distributed the draft final report for SP-G2, Task 2, describing the spawning riffle substrate characteristics (Attachment 13) and provided a presentation (Attachment 14). He described the sampling techniques and general coarsening of materials downstream from the Project. He explained that armoring is also increasing downstream due to the lack of gravel recruitment.

SP-T10

Gail Kuenster (DWR) distributed Draft Final Report, Effects of Project Features, Operations and Maintenance on Upland Plant Communities (Attachment 15) and provided a presentation (Attachment 16). She noted that nearly all communities have non-native species and the disturbance areas have higher proportions of non-natives than other areas within the Project boundary. She described how the elimination of low-to moderately severe fires has affected the structure and composition of the community vegetation and described a variety of techniques used to reduce fuel loads and increase biodiversity and community health.

SP-F3.1, Task 4C

Adrian Pitts (SWRI) distributed the Final Report: Evaluation of Water Surface Fluctuations on Bass Nest Dewatering and Characterization of Inundated Littoral Habitat in the Thermalito Afterbay (Attachment 17) and provided a presentation (Attachment 18). Adrian explained that based on available information, analysis indicated that during some years relatively high percentages of largemouth and smallmouth bass nests would be dewatered. However, in all years evaluated, water surface elevation fluctuations would not be expected to dewater any spotted bass nests.

SP-W3

Tom Boullion (DWR) distributed SP-W3, Year 1 Progress Report, Parts 1, 2, and 3 (Attachment 19) and provided a presentation (Attachment 20) that discussed the findings of water quality sampling conducted at recreation sites. He described high bacteria findings at developed swim areas such as the Forebay and Bedrock Park and cited wildlife use as well as human origin for the bacteria. Tom also described high levels of petroleum products around marinas and somewhat elevated metals in storm water sampled. The EWG discussed the role of the County in public health notification at swim beaches and DWR indicated they were working on the situation with DPR.

SP-W7

Tom Boullion distributed Land and Watershed Management Effects on Water Quality, Tasks 1 and 1B (Attachment 21) and provided a presentation (Attachment 22). He reported that storm runoff from the urbanized areas of Oroville could affect water quality in Project waters with high bacteria levels measured in runoff as well as water quality criteria exceedance for aluminum, arsenic, iron, zinc, and manganese. There is no indication that pesticide application within the OWA is affecting water quality in Project waters.

VII. Next Steps

The EWG agreed to review SP-F1, SP-F5.7, Task 2 and SP-G2, Tasks 3 & 4 at the next EWG meeting. The participants agreed that the next EWG meeting would be:

Date: September 29, 2004
Time: 9:00 a.m. – 4:00 p.m.
Location: Oroville Field Division

Action Items

The following action items identified by the EWG include a description of the action, the participant responsible for the action, and due date.

Carry-over:

Action Item #E137:	Provide copy of matrix to Mike Mainz (CDFG)
Responsible:	MWH
Due Date:	August 25, 2004